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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/528,523	08/30/2005	Vincent Deveaud	S1022.81039US00	8305
46329	7590	11/09/2007		
STMicroelectronics Inc. c/o WOLF, GREENFIELD & SACKS, P.C. 600 Atlantic Avenue BOSTON, MA 02210-2206			EXAMINER CAO, CHUN	
			ART UNIT 2115	PAPER NUMBER
			MAIL DATE 11/09/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/528,523	<b>Applicant(s)</b> DEVEAUD ET AL.	
	<b>Examiner</b> Chun Cao	<b>Art Unit</b> 2115	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 September 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received..

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **Final Rejection**

1. It is hereby acknowledged that the following papers have been received and placed of record in the file: Amendment Dated 9/4/07.
2. Claims 1-11 are presented for examination.
3. The text of those applicable section of Title 35, U.S. Code not included in this action can be found in the prior Office Action.
4. The rejections are respectfully maintained to the extended that is applicable to the newly amended claims and reproduced infra for applicant's convenience.
5. Claims 8-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claim 8, It is not clearly understood what is mean by: in line 2, "the variable supply element is configure to supply to...", it should be -- the variable supply element is configure to supply power to... --.

Claim 9-11 are rejected because they incorporate the deficiencies of claim 8.

6. Claims 1-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Timm et al. (Timm)<sup>1</sup>, U.S. patent no. 6,827,278.

As per claim 3, Tim discloses an apparatus [figures 1-3] for supplying power to at least one asynchronous calculation element of an integrated circuit [col. 5, lines 13-27], comprising a variable supply element configured to randomly distribute in a predetermined time window ["clock T is determined; and an uniform energy is

distributed to the asynchronous calculation element"; col. 4, lines 45-60; col. 6, lines 43-64; col. 9, lines 16-21 ], an instantaneous energy provided to the asynchronous calculation element, a total power ["It fixes the consumption of electrical energy in respect of its variation in time"] in the predetermined time window being predetermined [col. 6, lines 43-64; col. 7, lines 36-59; col. 8, lines 8-12; col. 9, line 51-col. 10, line 12].

As per claim 4, Timm discloses that the variable supply element is controlled by a pseudo-random generator [figures 1, 3; col. 6, lines 54-64; col. 9, lines 16-21, 51-57].

As per claim 8, Timm discloses that the variable supply element is configured to supply power to the asynchronous element so as to mask data [encryption/decryption of data] being processed by the asynchronous element without adding to a power consumption of the asynchronous element [col. 5, line 66-col. 6, line 6].

As per claim 9, Timm discloses that the variable supply element supplies the instantaneous energy based on constraints comprising at least one of a minimum power necessary for the asynchronous element to maintain a current state, a maximum possible power required by the asynchronous element to complete calculations, and a length of time for supplying the instantaneous energy [col. 5, lines 40-47].

As per claim 10, Timm discloses the asynchronous element comprises a plurality of distinct asynchronous elements and wherein the instantaneous energy supplied to said elements may be supplied separately from one another or together by means of a same controller [fig. 1; col. 4, lines 44-60].

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<sup>1</sup> Timm is a reference cited by applicant.

As per claim 11, Timm inherently discloses that wherein if the asynchronous elements are supplied separately with the instantaneous energy, the variable supply element comprises a plurality of distinct variable supply elements each driving one asynchronous element of the plurality of distinct asynchronous elements [figures 1, 5; col. 4, lines 45-60; col. 8, lines 6-15, 41-51].

As to claims 1-2 and 5-7, Claims 3-4 and 8-11 basically are the corresponding elements that are carried out the method of operating steps in claims 1-2 and 5-7. Accordingly, claims 1-2 and 5-7 are rejected for the same reason as set forth in claims 3-4 and 8-11.

7. Applicant's arguments filed on 9/4/07, which have been fully considered but they are not persuasive.

8. In the remarks, applicant argued in substance that Timm does not disclose that randomly distributing, in a predetermined time window, an instantaneous supply power to the asynchronous calculation element.

9. The examiner respectfully traverses. Timm discloses randomly distribute in a predetermined time window ["clock T is determined; and an uniform energy is distributed to the asynchronous calculation element"; col. 4, lines 45-60; col. 6, lines 43-64; col. 9, lines 16-21], an instantaneous energy provided to the asynchronous calculation element [col. 9, line 51-col. 10, line 12].

Also see rejection above.

**THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chun Cao whose telephone number is 571-272-3664. The examiner can normally be reached on Monday-Friday from 7:30 am-4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas C. Lee can be reached on 571-272-3667. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status

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information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nov. 5 2007



**CHUN CAO**  
**PRIMARY EXAMINER**